Amendments to the Specification:

Please replace the paragraph beginning on page 3, line 4 with the following amended paragraph:

Most of the time, the immune response is associated with cooperation between the antibodies, or the molecular mediated arm, and the cellular mediated arm. Typically, the cooperative response is the antibodies' known dependent cytotoxic response. Classical immunotherapy techniques have used such antigens as vaccine agents. These agents were treated to avoid their pathogenicity and/or they were mixed with adjuvants in order to facilitate their accessibility, recognizance or stimulant activity. Antigens are necessary for immune response because, by definition, an immune response is a specific antigen-addressed response, however, modern research has recognized that sometimes although antigens are present, their immunological power is not enough to stimulate an effective immune response. In such cases, the immune response can be elicited by other substances or by modified antigens with more powerful antigenic activity and cross-reactivity with the specific target of the immune response. In addition, some agents have been identified which elicit immune responses not upon specific antigens, but, rather, upon specific or global reactive portions of the immune system. As a consequence, today it is more appropriate to identify this whole family of compounds which may be used in immunotherapy, including specific antigens and all other agents

that elicit or enhance a response against antigens or from the immune system, collectively, as immunogens.

Please replace the paragraph beginning on page 7, line 25 with the following amended paragraph:

Currently, there is active development ~~directed towards~~ in the use of recombinant monoclonal antibodies directed against molecular tumor targets which represents a variation of adoptive specific immunotherapy. Components of tumor receptors such as H2-neu and CD20, which may be over-expressed in cells of some breast cancers and non-Hodgkin's lymphomas, respectively, are the most effective target for the monoclonal antibodies currently available for immunotherapy. The effectiveness of the treatment of patients having malignant diseases with monoclonal antibodies also appears to be more the exception than the rule. The remissions are frequently limited to only a fraction of patients treated and having tumors with the supposed antigenic target, and these remissions are generally only temporary.

Please replace the paragraph beginning on page 10, line 15 with the following amended paragraph:

The second difficulty encountered in active specific immunotherapy relates to the preparation of a vaccine having the

patient's malignant tumor as its source. Here, both quantitative and qualitative limitations are present. To ~~being~~ begin with, the number of inoculations and the amount of immunogen, or vaccine, in each inoculation as required by this technique are limited by the availability of surgical tumor specimens, and the typically weak antigens which are present at low cellular concentrations therein. In addition, and as noted above with respect to adoptive specific immunotherapy techniques, if tumor cells modify their antigenic profile due to their high rate of mutation, the immune effectors elicited by inoculation of the original vaccine may not recognize a target in the remaining mutated tumor cells. As a result, repeated inoculations of the original vaccine will not usually be effective unless current surgical tumor specimens are available in order to prepare vaccines containing the successively mutated antigens, however, such current surgical tumor specimens are hardly, if ever, available.

Please replace the paragraph beginning on page 21, line 25 with the following amended paragraph:

To elaborate further, when tumor cell stress is induced by hypoglycemia through insulin treatment, it is noted that insulin, which may also be utilized by the method of the present invention for inducing protein synthesis, in sufficient dosages produces hypoglycemia, which induces SSP synthesis in cells subjected to

this glucose restrictive condition. Because malignant cells normally require an elevated level of glycolysis to begin with, hypoglycemia presents a particularly high level of risk for these cells and, therefore, a particularly high level of stress, with a subsequent high level of SSP or chaperone molecule synthesis which may be utilized to at least temporarily preserve and store the plurality of TAA in the plurality of malignant tumor cells.

Please replace the paragraph beginning on page 24, line 5 with the following amended paragraph:

To begin, activating a plurality of APC may be accomplished via an adequate cytokine treatment, such as by administering a granulocyte-macrophage colony stimulating factor (GM-CSF). Human recombinant GM-CSF is known as an immune modulating cytokine that increases the dendritic cell population promoting its maturation and, as a consequence, it amplifies the dendritic cell function of antigen presentation in order to start the immune response. This pharmacological property has been used to potentiate cancer vaccines with different external immunogens. In the present invention, and in particular, in an internal vaccine as previously described, the GM-CSF activated plurality of APC encounter the plurality of TAA which was previously preserved and stored in the plurality of tumor cells of the patient's body, which have been subsequently released into the patient's bloodstream via the

mechanisms of autoschizis and/or apoptosis, which are described in further detail below. Additionally, the GM-CSF activated plurality of APC may encounter the plurality of TAA contained in an external vaccine comprising an autologous hemoderivative composition, as is also discussed in greater detail below.

Please replace the paragraph beginning on page 30, line 1 with the following amended paragraph:

A more detailed description of the method for preparing an external vaccine comprising an autologous hemoderivative composition is as follows. The method of the present invention provides for extracting a blood specimen of approximately 20 milliliters from a femoral artery of the patient into a first syringe pre-filled with approximately 5,000 international units (I.U.) of heparin per milliliter, resulting in solution having a heparin concentration in a range of between approximately 250 to 300 I.U. per milliliter. The blood specimen solution is allowed to sediment or settle in vertical position at a temperature of approximately 37 degrees centigrade. After approximately one hour, an aliquot of a supernatant of white cell rich blood plasma is separated from the blood specimen solution into a second syringe containing between approximately 3 to 4 parts of distilled water per part of the plasma-cell layer forming a plasma-cell solution and, thereby, inducing a hypotonic cytolysis. The method of the

present invention further provides that the plasma-cell solution be stored at approximately minus twenty degrees centigrade for a period of approximately 24 hours, after which, the plasma-cell solution is warmed up to approximately 37 degrees centigrade in order to complete the hypotonic-hypothermic cytolysis process.

Please replace the paragraph beginning on page 40, line 19 with the following amended paragraph:

Also, as indicated above, the method of the present invention further comprises storing the TAA in the plurality of cells of the patient by inducing the synthesis of a plurality of stress shock proteins (SSP). Once again, the method may comprise inducing the synthesis of the SSP ~~comprises~~ by administering indomethacin to the patient. In one alternate embodiment, the method of the present invention may include inducing the synthesis of the SSP by administering a corticoid compound to the patient.

Please replace the paragraph beginning on page 47, line 10 with the following amended paragraph:

The present invention further comprises a method for preparing the autologous hemoderivative composition, as illustrated schematically in Figure 6, for use in eliciting an effective antitumoral immune response in a patient, such as may be utilized

in the method described herein. In one preferred embodiment, the method for preparing the autologous hemoderivative composition includes extracting a blood specimen of approximately 20 milliliters from a femoral artery of the patient into a first syringe pre-filled with approximately 5,000 international units (I.U.) of heparin per milliliter, resulting in a solution having a heparin concentration in a range of between approximately 250 to 300 I.U. per milliliter. The blood specimen solution is allowed to settle while maintained in vertical position at a temperature of approximately 37 degrees centigrade. After approximately one hour, an aliquot of a supernatant of white cell rich blood plasma is separated from the blood specimen solution into a second syringe containing between approximately 3 to 4 parts of distilled water per part of the plasma-cell layer thereby forming a plasma-cell solution and, inducing a hypotonic cytolysis. The method of the present invention further provides that the plasma-cell solution be stored at approximately minus twenty degrees centigrade for a period of approximately 24 hours, after which, the plasma-cell solution is warmed up to approximately 37 degrees centigrade in order to complete a hypotonic-hypothermic cytolysis process.

Please replace the paragraph beginning on page 50, line 10 with the following amended paragraph:

In addition, the blood specimen solution may comprise a blood specimen extracted from a patient, preferably, from femoral artery of the patient, into a syringe ~~solution~~ comprising, in at least one embodiment, approximately 5,000 international units (I.U.) of heparin per milliliter, resulting in a solution having a heparin [[at a]] concentration in a range of between approximately 250 to 300 I.U. per milliliter.